**Description from Company/Supervisor**

Software ecosystems have emerged as a successful approach for the development of complex software systems offering plenty of benefits as well as challenges. The ecosystem often relies on a shared software platform on top of which different parties contribute their own (company specific) innovations. In this way, the cost of developing the platform is shared by a number of companies, each of which is free to extend it with their own modules. Similarly, all the participants gain the benefits of joint investment in the platform.

In the simplest form of interaction with the platform, ecosystem actors use the platform to develop applications through the usage of its APIs. To allow application developers to achieve expected results in an efficient fashion is still a challenge. Poorly designed APIs represent a great risk because they may inhibit the platform provider's ability of moving forward in sustaining the ecosystem: Once an API is published and used, that API cannot simply be changed without compromising the workflow of the API's users.

Ideally, any major API change should be traceable to well-articulated ecosystem business need and should be measurable against a business outcome that aligns with the company’s strategy. Unfortunately, not all API architects have a clear, defined business purpose when evolving API’s. Such evolution might be driven by pure technical considerations such as programming language best practices. Further, in some cases an API decision is made for a vague objective, such as innovation. The envisioned framework helps the company to keep track of all API changes and explore the extent to which such design decisions map to concrete business goals in the ecosystem. This will also strengthen synchronization between ecosystem actors and help make informed technical decisions in the ecosystem.